SAN FRANCISCO BAY CONSERVATION AND DEVELOPMENT COMMISSION
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TO: Commissioners and Alternates

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SUBJECT: **Briefing on Delta Plan and Status Report on Other Delta Issues**
(For Commission Consideration on November 3, 2011)

Summary

On November 3, 2011, the Hon. Phil Isenberg, Chair of the Delta Stewardship Council, will brief the Commission on the fifth staff draft of the Delta Plan, which was released on August 3, 2011. The Commission staff has reviewed all drafts of the Delta Plan and provided written and oral comments focusing on the need for wetland restoration in the Suisun Marsh, adequate freshwater flows to support brackish habitat in the Suisun Marsh and ecosystem processes in the Bay, and consideration of climate change impacts in planning for tidal restoration in the Suisun Marsh. The draft environmental impact report for the Delta Plan will be released in late October or early November 2011. The Commission staff also helped organize and chaired a session on Delta issues at the State of the Estuary conference, held in Oakland in September 2011. The agencies developing the Bay Delta Conservation Plan held a public meeting in September 2011 provided the public with material related to the environmental effects analysis for the project in October 2011.

Staff Report

Background. The staff is participating in ongoing Bay-Delta planning processes, focusing on the need for (1) providing adequate freshwater flows to the Bay and Suisun Marsh, and (2) developing a coordinated regional approach to wetland restoration, sediment management, and planning for climate change in the Bay and Delta. The staff is helping achieve these goals by making formal comments on draft plans and environmental documents, participating in interagency and public meetings, working directly with staff of other agencies and organizations, and tracking legislation. The Commission's Strategic Plan directs staff to provide quarterly status reports on Bay-Delta planning and decision-making processes. The last report was dated August 5, 2011.

Delta Plan

The Delta Stewardship Council (Council) must adopt a comprehensive management plan for the Delta by January 1, 2012. The Council will then oversee implementation of the Delta Plan, which will be used to further the "coequal goals" of ecosystem restoration in the Delta and water supply reliability for users dependent on water from the Bay-Delta watershed.

On November 3, 2011, the Hon. Phil Isenberg, Chair of the Delta Stewardship Council (DSC), will brief the Commission on the fifth staff draft of the Delta Plan, which was released on August 3, 2011. As discussed in the Commission staff's previous status report on Delta issues, the Commission staff has reviewed all drafts of the Delta Plan and provided written and oral comments focusing on the need for wetland restoration in the Suisun Marsh, adequate freshwater flows to support brackish habitat in the Suisun Marsh and ecosystem processes in the Bay, and consideration of climate change impacts in planning for tidal restoration in the Suisun Marsh. The staff has also requested that the Delta Plan be consistent with Bay Plan policies, where applicable, particularly with respect to the

Suisun Marsh. In order to provide background for Chair Isenberg's briefing on the Delta Plan at the November 3 Commission meeting, the overview of the Delta Plan provided in the staff's previous status report of August 5, 2011 is presented below.

Governance. The Delta Plan is similar to the Bay Plan in that it includes findings and policies. It is different from the Bay Plan in that it also includes problem statements, recommendations, and performance measures to evaluate progress toward achieving its goals. The Delta Plan states:

> In most cases, the Delta Plan functions as a strategic document because it provides guidance and recommendations to cities, counties, and State, federal, and local agencies for how to restore the Delta ecosystem and provide a more reliable water supply for California. The Council will work with government agencies, the California Legislature, and stakeholders to promote and coordinate implementation of these recommendations.
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> However, the Delta Plan also contains several significant regulatory policies with which cities, counties and state and local agencies are expected to comply. The Delta Reform Act of 2009 established a certification process for compliance with the Delta Plan. This means state and local agencies that propose to carry out, approve or fund a qualifying action, called a "covered action" in the Delta Plan, must certify that this action is consistent with the Delta Plan and must file a certificate of consistency with the Delta Stewardship Council.

Unlike the Commission, the Delta Stewardship Council does not have direct approval or permitting authority, but serves as an appellate body. The Delta Plan states:

> Any person alleging that a covered action is not consistent with the Delta Plan may appeal the certificate of consistency to the Council within 30 days of its being filed. Upon receiving an appeal, the Council has 60 days to hear the appeal and an additional 60 days to make its decision and issue specific written findings. If the covered action is found to be inconsistent, the project may not proceed until it is revised so that it is consistent with the Delta Plan.

The Delta Plan contains 12 proposed regulatory policies and 61 proposed recommendations. Those most relevant to the Commission's interests are discussed below.

Freshwater Inflow. Freshwater inflow is addressed in the ecosystem restoration and water quality chapters of the Delta Plan. The ecosystem restoration chapter of the Delta Plan notes, "The once pronounced seasonal and interannual flow variability has given way to more stable and artificially regulated conditions." The chapter further states:

> Strong scientific consensus supports the concept that water flows more closely reflecting historical flow conditions are best for native communities of aquatic organisms (Poff et al. 1997; Bunn and Arthington 2002). Flow is a major environmental driver that ultimately shapes ecological processes, habitat, and biotic composition in riverine and estuarine ecosystems such as the Delta. More natural flows are a key component of ecosystem restoration because they work hand in hand with habitat restoration to generate diverse and interconnected food webs, refuge options, spawning habitat, and regional food supplies (Carlisle et al. 2011)….
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> The current salinity and flow regime of the Bay-Delta Estuary is creating conditions unfavorable for native estuarine fish and favorable to introduced species. Current salinity conditions, at certain times and locations, also negatively affect municipal and agricultural uses of Delta water. Allowing salinity to vary in a way that benefits native fish species might further degrade the quality of Delta water for agricultural and municipal uses.

In Ecosystem Restoration Policy 1, the Delta Plan proposes to address this problem by directing the State Water Resources Control Board to, by June 2, 2014, adopt and implement updated flow objectives for the Delta that are necessary to achieve the coequal goals. The policy proposes potential actions that the Delta Stewardship Council could take if the Water Board is unable to meet its deadline.

The Delta Plan's water quality chapter addresses both drinking water quality and environmental water quality. It includes a discussion of the importance of high Delta outflows (i.e., freshwater inflow to the Bay) to several estuarine species:

> The interface between freshwater and saltwater is a critical region of the estuary for native fish and other organisms. Although there is no broadly accepted definition, the low salinity zone (LSZ) of the estuary is generally considered to be the region with salinity ranging from freshwater up to about 5 practical salinity 10 units (psu), about one-seventh the salinity of seawater. The part of the salinity gradient centered on 2 psu is considered to be of particular importance because it is hypothesized to be an area where suspended particulate matter and organisms accumulate. The location in the Bay-Delta where the tidally averaged bottom salinity is 2 psu is known as X2 (measured as distance in kilometers from the Golden Gate Bridge) and serves as a water quality standard to regulate Delta outflow. The endangered Delta smelt (*Hypomesus transpacificus*) show a preference for the LSZ. Their distribution during most of the year is centered near X2 (Nobriga et al. 2008). The position of X2 is also correlated with the abundance of several estuarine fish and invertebrates such as the bay shrimp (*Crangon franciscorum*) and longfin smelt (*Spirinchus thaleichthys*). That is, higher outflows (smaller X2 values) are correlated with greater abundance of longfin smelt and bay shrimp (Kimmerer 2004).

One of the Plan's performance measures for water quality is "[p]rogress toward increasing interannual variability of salinity in Suisun Bay and Suisun Marsh. In future years, salinity will trend higher during periods of low river flow and trend lower during periods of high river flow." In other words, the Delta Plan proposes generally achieving a more natural flow regime, and specifically measuring progress toward a more natural salinity regime in the Suisun Marsh.

Suisun Marsh Restoration. The fifth draft Delta Plan identifies the Suisun Marsh as one of five key areas in which implementation of habitat restoration projects should be prioritized. Ecosystem Restoration Recommendation 1 states, in part:

> The largest wetland area on the west coast of the contiguous United States, Suisun Marsh has been mostly disconnected from the estuary. Restoring significant portions of Suisun Marsh provides the brackish portion of the estuary with sea level rise accommodation space, opportunities for extensive land-water interface dynamics, and compressed chemical and biological gradients that support productive and complex food webs to which native species are adapted. An ongoing restoration project is the Department of Water Resources' Blacklock Restoration Project. Projects in the planning stage include the Department of Fish and Game's Hill Slough Restoration Project.

The staff believes this recommendation adequately addresses BCDC's interest in prioritizing habitat restoration in the Suisun Marsh and ensuring consideration of climate change impacts in the planning process.

Bay Plan Water Quality Policies. The Commission's regulatory and federal consistency authorities are discussed in Chapter 6 of the Delta Plan, which deals with water quality. The introductory section of this chapter states, in part:

> Water quality in the Delta is also regulated by the San Francisco Bay Conservation and Development Commission (BCDC), which has jurisdiction on all tidal areas of the Bay, including Suisun Bay and Suisun Marsh. BCDC policies regarding water quality are intended to prevent the release of pollution into Bay waters to the greatest extent feasible. The BCDC makes decisions regarding water quality impacts based on evaluation by and the advice of the San Francisco Bay [Regional Water Quality Control Board]. In addition to State actions, BCDC will review federal actions, permits, projects, licenses, and grants affecting the Bay, including Suisun Marsh, pursuant to the federal Coastal Zone Management Act.

In addition, Water Quality Recommendation 10 states, "To comply with the San Francisco Bay Conservation and Development Commission water quality policies and facilitate the commission's impact determination, proponents of actions potentially affecting water quality in Suisun Marsh should consult with the San Francisco Bay Regional Water Quality Control Board and obtain all necessary authorizations early in the process." The staff believes this recommendation adequately addresses the staff's request to ensure that the Delta Plan is consistent with the water quality policies of the *San Francisco Bay Plan*.

Environmental Analysis. A draft environmental impact report, based on the fifth draft Delta Plan, will be released in late October or early November. In June, the Council released a chart of conceptual alternatives to the Delta Plan that will be analyzed. In addition to the "no project alternative," alternatives include proposals submitted by coalitions representing environmental interests, urban and agricultural users of Delta water exports, and Delta communities.

Delta Sessions at the State of the Estuary Conference

The Commission staff worked with the staff of the Delta Protection Commission (DPC), the Delta Conservancy, the California Department of Fish and Game, The Nature Conservancy and others to develop two sessions on Delta restoration for the State of the Estuary conference, held in Oakland on September 20-21, 2011. The first session featured a wide range of topics, from historical ecology and wildlife-friendly agriculture to the DPC's economic sustainability plan for the Delta and the Delta Conservancy's efforts to build trust among Delta stakeholders. Highlights of the second session included presentations on markets for carbon sequestration, the adaptive management plan for the Dutch Slough tidal marsh restoration project, and the lessons learned from restoration of Liberty Island. All conference abstracts are available at http://www.sfestuary.org/soe2011/soe_abstracts.html.

BDCP

The main goal of the Bay Delta Conservation Plan (BDCP) process is to develop a framework for habitat restoration and water conveyance that will serve as an alternative to species-by-species take permits for Delta water project operations under the state and federal endangered species acts. The permit applicants (the California Department of Water Resources and the U.S. Bureau of Reclamation) have been working with water contractors, resource agencies, and nongovernmental organizations since 2006 to develop the plan.

The plan has been criticized by scientific review panels, Delta landowners, farmers, and community groups, as well as by salmon fishing advocates. The National Research Council (NRC) issued a report stating that the BDCP is missing clearly defined goals and a scientific analysis of the proposed project's potential impacts on Delta species. As part of its effort to address the NRC's critique, the California Natural Resources Agency stated that it has already improved its process for analyzing the environmental effects of the proposed project. The agency provided the public with material related to the environmental effects analysis in October 2011. The BDCP agencies plan to release the draft environmental documents in June 2012.

A public meeting was held on September 27, 2011, to provide all interested parties and the general public updates and information about the progress made on BDCP by its working groups, to provide an opportunity for input, and to report on next steps. On October 19, 2011, the California Assembly's Water, Parks and Wildlife Committee held an oversight hearing on the BDCP addressing funding, transparency and consistency with the 2009 comprehensive package of water legislation. At the hearing, Assembly Member Jared Huffman, chair of the Water, Parks and Wildlife Committee, stressed that the BDCP must be designed as part of a larger strategy to restore the Delta and recover key species.

Water Supply Update

Following a wet winter, the Central Valley Project began the 2012 water year on Oct. 1 with 9.3 million acre-feet (MAF) of water stored in six key reservoirs. The number reflects combined storage remaining at the end of the 2011 water year in Shasta, Trinity, Folsom, New Melones and Millerton reservoirs and the federal share of water in storage at San Luis Reservoir. Storage in the same reservoirs at this time last year totaled about 7.4 MAF, compared with 4.8 MAF in 2009, 4.1 MAF in 2008 and 5.5 MAF in 2007. The 15-year average carry-over storage is 6.9 MAF.

Threatened and Endangered Fish Updates

In October 2011, the California Department of Fish and Game announced that the September surveys for Delta fisheries showed a rebound for delta smelt, as well as substantial increases for other species assessed by the survey, including longfin smelt and striped bass. The announcement was based on the Fall Midwater Trawl survey, which provides the best estimate of the abundance of delta smelt. The September index value of 50 was the highest level seen in more than a decade, although it is still low compared to historic averages. The September survey was the first of four that will be conducted this fall.

Biologists attribute the increase in the fish populations to high flows from a wet winter and cool spring, although it is possible that restrictions on pumping by the state and federal water project intended to protect the smelt and salmon from extinction also helped. High flows benefit delta smelt in many ways: diluting pollution, increasing their food supply, reducing competition from invasive clams, pushing the smelt away from the state and federal water pumps, and pushing them into Suisun Bay, which provides some of the best smelt habitat in the estuary.

Fall Chinook salmon returns also increased this year. Counts on the Mokelumne River have surged, due at least in part to a ten-day closure of gates on the Delta Cross Channel during the peak of the fall migration in early to mid-October, according to the Golden Gate Salmon Association. The federal Bureau of Reclamation's gate closure allowed for more natural flows through the Delta that helped the salmon find their way back to their native spawning areas on the Mokelumne. Counts on the Feather River also exceeded last year's levels.